



OIML Certificate

OIML Member State

The Netherlands



Number R137/2012-A-NL1-25.06 revision 0 Project number 4023314 Page 1 of 4

Issuing authority NMi Certin B.V.

Person responsible: M.Ph.D. Schmidt

Applicant and Manufacturer

Transus Instruments B.V.

Bloesemlaan 4

3897 LN Zeewolde The Netherlands

Identification of the

certified type

An Ultrasonic Gas Meter

Manufacturers mark:

Transus Instruments B. V.

Type: LPM-zD

Characteristics

See following pages

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 137-1:2012 "Gas meters"

Accuracy class

1,0

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. This Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL1 17 November 2025

Certification Board

This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

> The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

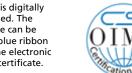
This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.







NMi Certin B.V. Thijsseweg 11 2629 JA Delft the Netherlands T +31 88 636 2332 certin@nmi.nl www.nmi.nl







OIML Certificate



Number R137/2012-A-NL1-25.06 revision 0 Project number 4023314 Page 2 of 4

The conformity was established by the results of tests and examinations provided in the associated report(s):



- No. NMi-3628146-01 dated 17 November 2025 that includes 56 pages.

Characteristics of the measuring instrument

In Table 1 the general characteristics of the measuring instrument are presented. In Table 2 the characteristics of the family of instruments are presented. The construction of the measuring instrument is recorded in the Documentation folder no. T13135-1.

Table 1 General characteristics

Destined for the measurement of	Gas Volume		
Intended for the measurement of	Natural Gas		
Accuracy class	1,0		
Minimum – maximum flow rate	See table 2		
Minimum - Maximum pressure	1 - 20 bar(a)		
Ambient temperature range	-25 – +55 °C; Condensing humidity		
Gas temperature range	-25 − +55 °C		
Designed for	Condensing humidity		
Orientation	All orientations		
Flow direction	Uni-Directional - forward		
Environmental classes	M1 / E2		
Transducer	Transducer types L3-25 3-path 250 kHz		
Path angle	60°		
Inlet / Outlet Piping	0D / 0D		
Power supply voltage	External 14 - 28 V DC power supply or a 14,4 V DC battery. When powered by external 14 - 28 V DC power supply, the internal battery pack is available as a backup power supply. During a power failure the internal battery keeps the meter running.		
Software identification	See table 3		







OIML Member StateThe Netherlands



Number R137/2012-A-NL1-25.06 revision 0 Project number 4023314 Page 3 of 4

OIML Certificate

Table 2 Flow characteristics of the gas meter



	,		Internal flow channel bore diameter	Minimum flow velocity	Minimum Transitional flow velocity	Maximum flow velocity
				V_{min}	V_{t}	V_{max}
	Inch	DN	[mm]	[m/s]	[m/s]	[m/s]
	2"	DN50	43			
	3"	DN80	66	0.2	2 5	35
Ī	4"	DN100	84	0,2	3,5	33
	6"	DN150	105			

The corresponding flow rates can be calculated as follows:

$$Q = v \cdot \frac{1}{4} \cdot \pi \cdot D^2 \cdot 3600$$

Where:

Q = flow rate $[m^3/h]$

v = velocity [m/s]

D = internal flow channel bore diameter [m].

Note:



If higher values are chosen for Q_{min} or Q_{t} and/or lower values for Q_{max} , it has to be taken into account that:

- If ratio $5 \le Qmax:Qmin < 50$ then ratio $Qmax:Qt \ge 5$

- If ratio Qmax:Qmin ≥ 50 then ratio Qmax:Qt ≥ 10

Table 3 Software identification of the gas meter

SW identifier	Version	CRC
Firmware / FPGA 1.3.0.92 / 01.00.01.16		0x38860BC1

The software versions can be read out on the gas meter display by navigating **Menu** → **System Info**.

Installation conditions:

Installation requirements

Any components which could affect the gas flow must be avoided within the prescribed inlet pipe length of 0 DN and at least 3 DN for the outlet pipe length. The inlet and outlet pipe must be designed as a straight pipe section of the same nominal diameter as the gas meter.









Number R137/2012-A-NL1-25.06 revision 0 Project number 4023314 Page 4 of 4

Certificate history:



Revision	Date	Description of the modification
0	17 November 2025	 Initial Parallel certificate of R137/2012-A-NL1-25-05 issued by NMi.









